



HYB-005US6.ST25

SEQUENCE LISTING

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Yu, Dong
Agrawal, Sudhir

<120> Modulation of Immunostimulatory Activity of Immunostimulatory
Oligonucleotide Analogs By Positional Chemical Changes

<130> HYB-005US6 (1006.006)

<140> US 10/694,075
<141> 2003-10-27

<150> US 09/965,116
<151> 2001-09-26

<150> US 09/712,898
<151> 2000-11-15

<150> US 60/235,452
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<223> c = C3-Linker

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<223> c = beta-L-Deoxynucleoside

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<221> modified_base
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c at position 5 = beta-L-Deoxynucleoside

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<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> modified linkage of oligodeoxynucleotide phosphorothioate

<221> modified_base
 <222> 9, 10
 <223> c at position 9 = beta-L-Deoxynucleoside
 g at position 10 = beta-L-Deoxynucleoside

<400> 85
 ctatctgacg ttctctgt 18

<210> 86
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> modified linkage of oligodeoxynucleotide phosphorothioate

<221> modified_base
 <222> 7
 <223> g = beta-L-Deoxynucleoside

<400> 86
 ctatctgacg ttctctgt 18

<210> 87
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> modified linkage of oligodeoxynucleotide phosphorothioate

<221> modified_base
 <222> 12
 <223> t = beta-L-Deoxynucleoside

<400> 87
 ctatctgacg ttctctgt 18

<210> 88
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> modified linkage of oligodeoxynucleotide phosphorothioate

<221> modified_base
 <222> (1)...(18)
 <223> all nucleotides = beta-L-deoxynucleoside

<400> 88
 ctatctgacg ttctctgt 18

<210> 89
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> modified linkage of oligodeoxynucleotide phosphorothioate

 <221> modified_base
 <222> 5
 <223> c = 2'-O-Propargyl-ribonucleoside

 <400> 89
 ctatctgacg ttctctgt 18

 <210> 90
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> modified linkage of oligodeoxynucleotide phosphorothioate

 <221> modified_base
 <222> 15
 <223> c = 2'-O'Propargyl-ribonucleoside

 <400> 90
 ctatctgacg ttctctgt 18

 <210> 91
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> modified linkage of oligodeoxynucleotide phosphorothioate

 <221> modified_base
 <222> 4, 5
 <223> a at position 4 = 1',2'-Dideoxyribose
 c at position 5 = 1',2'-Dideoxyribose

 <400> 91
 cctactagcg ttctcatc 18

 <210> 92
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> modified linkage of oligodeoxynucleotide phosphorothioate

 <221> modified_base
 <222> 4, 5
 <223> a at position 4 = C3-Linker
 c at position 5 = C3-Linker

 <400> 92
 cctactagcg ttctcatc 18

<210> 93
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> modified linkage of oligodeoxynucleotide phosphorothioate

<221> modified_base
 <222> 4, 5
 <223> a at position 4 = 3'-methoxyribonucleoside
 c at position 5 = 3'-methoxyribonucleoside

<400> 93
 cctactagcg ttctcatc

18

<210> 94
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> modified linkage of oligodeoxynucleotide phosphorothioate

<221> modified_base
 <222> 4, 5, 12
 <223> a at position 4 = 1',2'-Dideoxyribose
 c at position 5 = 1',2'-Dideoxyribose
 t at position 12 = 2'-methoxyribonucleoside

<400> 94
 cctactagcg ttctcatc

18

<210> 95
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> modified linkage of oligodeoxynucleotide phosphorothioate

<400> 95
 cctactaggc ttctcatc

18

<210> 96
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> modified oligodeoxynucleotide phosphorothioate

<221> modified_base
 <222> 10
 <223> g = 7-deazaguanine

<400> 96
 ctatctgacg ttctctgt

18

<210> 97
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> modified oligodeoxynucleotide phosphorothioate

<221> modified_base
 <222> 9
 <223> g = 7-deazaguanine

<400> 97
 ctatctgagc ttctctgt

18

<210> 98
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> modified oligodeoxynucleotide phosphorothioate

<400> 98
 tctcccagcg tgcgccat

18

<210> 99
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> modified oligodeoxynucleotide phosphorothioate

<221> modified_base
 <222> 10,14
 <223> g at positions 10 and 14 = 7-deazaguanine

<400> 99
 tctcccagcg tgcgccat

18

<210> 100
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> modified oligodeoxynucleotide phosphorothioate

<221> modified_base
 <222> 5
 <223> c = C3-Linker

<221> modified_base
 <222> 10
 <223> g = 7-deazaguanine

<400> 100
ctatctgacg ttctctgt 18

<210> 101
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> modified oligodeoxynucleotide phosphorothioate

<221> modified_base
<222> 10
<223> g = 6-thioguanine

<400> 101
ctatctgacg ttctctgt 18

<210> 102
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> modified oligodeoxynucleotide phosphorothioate

<221> modified_base
<222> 9
<223> g = 6-thioguanine

<400> 102
ctatctgagc ttctctgt 18

<210> 103
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> modified oligodeoxynucleotide phosphorothioate

<221> modified_base
<222> 9
<223> c = 4-thiouridine

<400> 103
ctatctgacg ttctctgt 18

<210> 104
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> modified oligodeoxynucleotide phosphorothioate

<221> modified_base
<222> 5

<223> c = 1,2-Dideoxyribose

<221> modified_base

<222> 9

<223> c = 4-thiouridine

<400> 104

ctatctgacg ttctctgt

18

<210> 105

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> modified oligodeoxynucleotide phosphorothioate

<221> modified_base

<222> 9

<223> c = Ara-C

<400> 105

ctatctgacg ttctctgt

18

<210> 106

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> modified oligodeoxynucleotide phosphorothioate

<221> modified_base

<222> 10

<223> c = Ara-C

<400> 106

ctactctgac cttctctgt

19

<210> 107

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> modified oligodeoxynucleotide phosphorothioate

<221> modified_base

<222> 9

<223> c = 1',2'-Dideoxyribose

<400> 107

ctatctgacg ttctctgt

18

<210> 108

<211> 18

<212> DNA

<213> Artificial Sequence

<220>
<223> modified oligodeoxynucleotide phosphorothioate

<221> modified_base
<222> 8
<223> a = 1',2'-Dideoxyribose

<400> 108
ctatctgacg ttctctgt

18

<210> 109
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> modified oligodeoxynucleotide phosphorothioate

<221> modified_base
<222> 6
<223> t = 1',2'-Dideoxyribose

<400> 109
ctatctgacg ttctctgt

18

<210> 110
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> modified oligodeoxynucleotide phosphorothioate

<221> modified_base
<222> 4
<223> t = 1',2'-Dideoxyribose

<400> 110
ctatctgacg ttctctgt

18

<210> 111
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> modified oligodeoxynucleotide phosphorothioate

<221> modified_base
<222> 11
<223> t = 1',2'-Dideoxyribose

<400> 111
ctatctgacg ttctctgt

18

<210> 112
<211> 18
<212> DNA

<213> Artificial Sequence

<220>

<223> modified oligodeoxynucleotide phosphorothioate

<221> modified_base

<222> 13

<223> c = 1',2'-Dideoxyribose

<400> 112

ctatctgacg ttctctgt

18